

90, UPPER TULSE HILL. S.W.

June 22 1889

Dear Sir,

I send herewith your form
filled up, & an account of the more
notable work done here.

I do not know if you contemplate
illustrations to your work, but I send
by book post a photograph of the
Drematog, & a portrait of myself.

Respectfully
William Huggins

is there any ^{man/whom} from you could
recommend to me.

We hope that you & Mrs
Thompson have had a pleasant and
invigorating holiday, during which
you have been very "happy" (in both
senses of the word) with your
pencil & brush.

Lady Huggins unite with me
in cordial regards to Mrs Thompson
& to yourself

We read with interest
accounts of your
lecture at Bradford.

Yours sincerely
William Huggins

DSI

Sir Wm Huggins

90, UPPER TULSE HILL, S.W.

6 Oct. 1900.

Dear Professor Thompson.

I know that your
time is more than fully taken up
with your many & diverse interests,
and so I do not ask for more
than a couple of lines on a postcard
of your convenience in reply to
two questions.

The electricity laid on here is
an alternating current of 220 volts
& 50 frequency per second. Dr

my laboratory I have a transformer reducing the pressure to 50 volts.

Now for some work I should like to have a continuous current of 50 volts, & going up to 20 or 25 amperes.

My two questions are:

- (1) Do you know of any apparatus simpler than a motor & dynamo on same axis

for transforming the alternating into a continuous current? If so, just a reference to it.

I know the transformation may be accomplished by a double electro-lytic arrangement; but this is not very satisfactory even for ^{very} small currents. There is a German Interrupter, interrupting the alternating current once every period at point of maximum intensity. I am told by the makers that it is not satisfactory with a frequency of 50.

- (2) If resource should be had to a motor-dynamo, then —

2 May, 1902.

Dear Mr Cooke,

As the Ladies' Lingerie
is held in the rooms of the Society
it is necessary not to have it
overcrowded, and some time
ago, I believe, though I had
not anything to do with the
matter personally, the lots
of persons, not Bellows, had

to be reduced.

The matter of invitations is
wholly in the hands of a small
committee, and I have sent
your request on to the com-
mittee.

Personally I shall be
pleased to see you & Mrs
Cook at the service

Yours sincerely,
William Suggs

4. 9. 1904

IX, 28

UPPER TOLSE HILL. S.W.

~~Nov 1~~ Nov 1 1872

Dear Dr. Stoker

Very glad indeed

that you can come.

The nearest way from Buxton

station is up Buxton Hill

not up Tulse Hill.

On the side I give

chart of the neighbourhood.

I am very

Yours

William Huggins

130
Ann
90, UPPER TULSE HILL. S.W.

London.

John N. Cobb Esq.,

16 May, 1893.

Dear Sir,

We append, as
you wish, our autographs

I am faithfully
— —
William Staggins

Margaret Lindsay Staggins.

TO: DIRECTOR, FBI (100-441100)

DSI

Astronomical Observatories.

Cincinnati, Ohio, U. S. A.,

June 8 1889.

Professor

Wm Huggins

London, England

DEAR SIR:

I am compiling for publication a list of the principal Observatories of the world, with their personnel and equipment. Below is a blank form suggesting the kind of information wanted from the Observatory with which you are connected. Will you kindly aid me by causing it to be filled out and returned by mail, and thus greatly oblige,

Yours very truly,

WM. H. KNIGHT, 108 York Street.

1. Location— 90 Upper Tulse Hill, London, S.W.
2. Name— Tulse Hill Observatory.
3. When and by whom established— Private Observatory established by myself in 1855
4. Latitude and Longitude— $51^{\circ} 26' 47''$. Long $6^{\circ} 56''$ W of Greenwich
5. Altitude above sea level— 157 feet above mean sea level.
6. Description of building— Iron building ^{on brick walls} with revolving drum.
7. Telescopes—Descriptions, dimensions, maker's name, when made, etc.—
15 inch aperture, 15 feet focal length, refractor; 18 inch Cassegrain with metallic speculum; both mounted on same equatorial; declination axes on within the other, so that telescopes move independently in declination, but both carried by clockwork controlled by pendulum. Made by Sir H. Grubb of Dublin in 1870.
8. Other equipment—Description, makers, etc.—
Various spectroscopes. In adjoining laboratories, Induction coils; vacuum pumps; dynamo machine and steam engine; and chemical and photographic apparatus for spectroscopical research.
9. No. volumes in Library—rich in what department— Private library only
10. Other items of interest—

PERSONNEL OF THE OBSERVATORY.

11. Director— Name— William Huggins
Date assumed charge—
Previously from what Observatory—
Special Department of investigation— Spectroscopical Research.
12. Assistant Observer— Mrs. Huggins assists me in the Observatory & Laboratories.
Previously from what Observatory—
13. Other assistants—
14. List of previous directors of this Observatory in chronological order, with dates—
15. Special line of work or research in this Observatory— Spectroscopical Research.
16. Notable work accomplished— see separate sheet of paper
17. Other features or information of interest—

18. Please send any printed or illustrative matter pertaining to your personnel or equipment that may be in convenient shape for mailing.

Date

June 22 1889

Signature

William Huggins

Official position

D.C.R., L.L.D., F.R.S.

If the writer finds a lack of space under any head for the information supplementary sheet of paper.

Correspondent of the Institute of France.
dc dc

18th Nov 1890

I have just received your letter of the 17th inst. and am glad to hear that you are well. I am also well and hope this letter will find you the same. I have not much news to write at present. I am still in the same place and doing the same work. I hope to hear from you again soon.

Huggins, William,

F.R.S.

D.C.L. (Oxon.) LL.D. (Cantab. Edin. et Dubl.) Math. D. Lugd.

Bat. Hon. F.R.S.E. F.R.A.S. Ord. Imp. Bras. Rosae Com. Inst. Fr. (Acad.

Sci.) et Soc. Reg. Sci. Gött. Mem. Corr. Acad. Lync. Romæ Soc. Reg. Sci.

Hafn. Physiogr. Lund. Reg. Boie. Marob. Acad. Reg. Sci. Acad. Reg. Hib.

Soc. Reg. Dubl. et Lit. Phil. Manc., Soc. Honor. 90 Upper Tulse-hill; and

Athenæum Club. S.W.

c

1. Place and date of birth.

London. February 7th. 1824.

2. At what institutions educated and date of graduation.

City of London School + subsequently
private tuition.

7. With what scientific societies are you connected?

Fellow of the Royal Society
Foreign Secretary Royal Astronomical Society.
Fellow of the Physical Society
" " R. Microscopical Society.

Honorary D.C.L. Oxford

" L.L.D. Cambridge

" L.L.D. Edinburgh

" L.L.D. Dublin

" Math. D. University of Leyden, Tercentenary commemoration 1875

Commander of the Order of the Rose, Brazil.

Corresponding member of the Académie des Sciences, Institut de France.

Honorary Fellow of the Royal Society of Edinburgh.

" " Royal Dublin Society

" " Royal Irish Academy

" " Literary and Philosophical Society of Manchester.

Foreign Member of the Reale Accademia dei Lincei, Rome.

" " the Royal Society of ^{Copenhagen} Denmark

" " Philosophical Society of Lund, Sweden

" " Royal Society of Sciences Upsala, Sweden

" " Royal Society of Sciences of Bohemia, Prague

Corresponding member Royal Society of Sciences, Göttingen

" " Società degli Spettroscopisti Italiani

Received the Royal Medal of the Royal Society 1866

" " Gold Medal Royal Astronomical Society 1867

" " " " " " 1885

" " Prix Calande, Académie des Sciences, Paris 1872

" " Prix Volz, Académie des Sciences, Paris 1882

" " Prix Janssen, " " " " 1888

" " Rumford Gold Medal, Royal Society, 1880

Signed William Huggins.

90 Upper Tulse Hill

London, S.W.

HUGGINS, Sir William - English Astronomer

B. February 7, 1824. London

D. May 13, 1910. Upper Tulse Hill (Observatory)

Pioneer in the use of the spectroscope in the spectrum-analysis of the chemical constitution of stars and in spectroscopic photography. He discovered that the light of comets is emitted by luminous vapor of carbon and that of certain nebulae by a mass of glowing gases, so that not all nebulae are composed of aggregations of stars. He received the highest honors and medals of many scientific societies.

WEINER

A.L.S. 2 p. 8vo, Upper Tulse Hill (London, his private observatory)
May 2, 1912 regarding an invitation for a soiree at the Royal Society.

Huggins (William) F.R.S., D.C.L., &c.

Astronomer

b. 1824

Autograph letter, signed, 1872

HUGGINS (Sir William, P.R.S., 1824-1910) A.L.S. (WILLIAM HUGGINS), 90 Upper Tulse Hill, S.W., 6 Oct. 1900, to 'Dear Prof. [Silvanus P.] Thompson,' 4 pages 8vo., £1, 12s 6d
... 'Do you know of any apparatus simpler than a motor & dynamo for transforming the alternating with a continuous current? ... This is followed by an account of his troubles with his electrical apparatus. LONDON BOTHERAN

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DSI

(J. P. JOULE), Old Trafford, Manchester, Mar. 4/67, 1½ pages 8vo., £1, 12s 6d
... 'I have not received the paper setting forth the arrangements of the Imperial Commission ... but I feel it doubtful if I could attend in Paris during the time I have heard mentioned.' ...